

I take this occasion also to show some details of the postabdomen of *L. quadrata* (Malloch) in fig. 2, as well as similar details in *L. braziliensis* (Frost) in fig. 1, supplementing the figures given by Spencer (1963, pp. 365 and 358 resp.). Both of these species are pests of potato plants in Pichincha, Ecuador, and the specimens from which the drawings were made were received from that locality through Dr. Gualberto Merino M., of the Instituto Nacional de Investigaciones Agropecuarias, Quito, Ecuador.

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NEW SPECIES OF BAT MITES FROM SOUTHEAST ASIA AND THE
PACIFIC REGION, WITH A NOTE ON PERIGLISCHRODES GRESSITTI
BAK. & DELF.

(ACARINA: SPINTURNICIDAE)¹

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ABSTRACT—Two new species and one new subspecies of bat mites are described from Southeast Asia and the Pacific region. These are *Ancystropus nakatae*, n. sp., *Meristaspis hardyi*, n. sp., and *M. jordani philippinensis*, n. ssp. *Periglischrodes gressitti* Bak. and Delf., which is a nasal mite, is transferred from Spinturnicidae to Rhinonyssidae.

Rudnick (1960) reviewed the family Spinturnicidae and recognized three species of bat mites from Southeast Asia and the Pacific region. Delfinado and Baker (1963) and Baker and Delfinado (1964) reported 15 species and two subspecies of these mites from the above regions of which 11 were not previously known. The author, while working with the collection of B. P. Bishop Museum, Honolulu, Hawaii, discovered two additional species and one subspecies that are described here as new. Length of sternal shield and length and width of tritosternum are taken in the middle of the shield; the width of sternal

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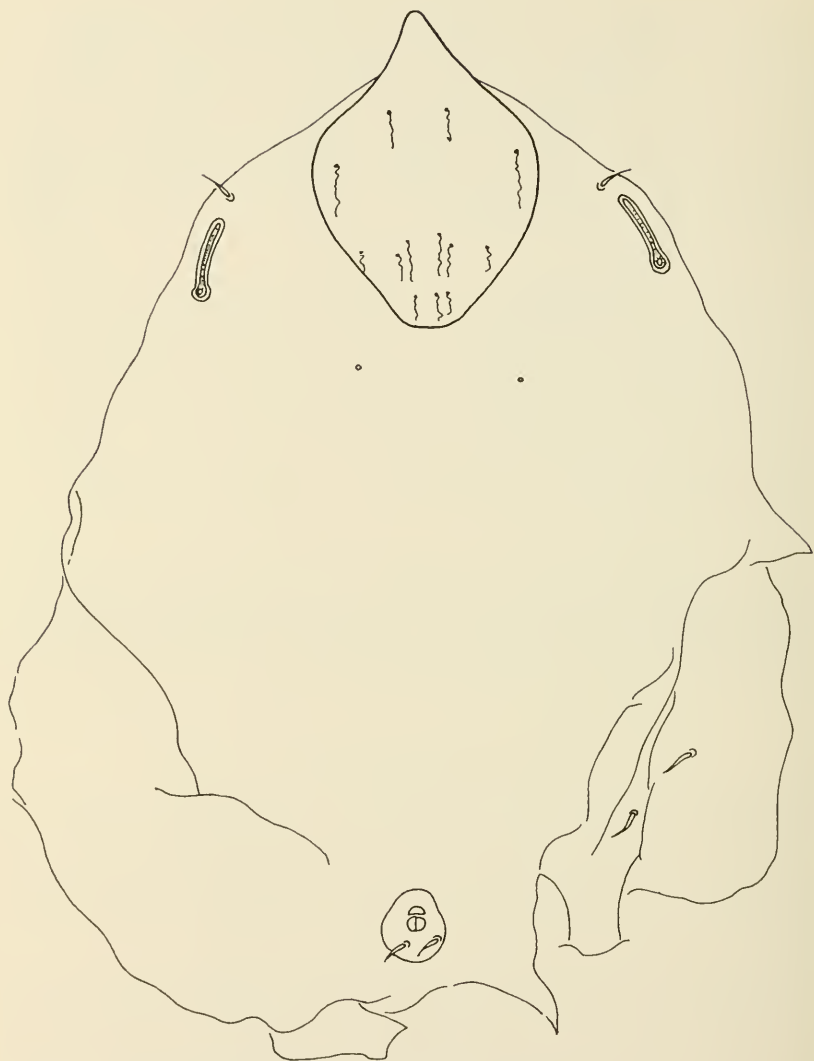


Fig. 1. *Ancystropus nakatae*, n. sp., ♀, dorsum.

shield is taken near the 2nd pair of setae. The holotype and paratypes, unless otherwise stated, are deposited in Bernice P. Bishop Museum, Honolulu, Hawaii.

I am grateful to Dr. Nixon A. Wilson, B. P. Bishop Museum, Honolulu, for making the bat mite collection available to me and for his generous aid on many occasions.

***Ancystropus nakatae*, n. sp.**

(Figs. 1, 2)

This species is close to *Ancystropus zeleborii* Kolenati but differs from it in that *A. nakatae* n. sp. has a large idiosoma and long tritosternum, as in *Oncoscelus kanheri* (Hireg. & Bal); also there is only one pair of dorsal propodosomal setae anterior to the peritremes.

Female: Idiosoma large, with 1 pair of propodosomal setae anterior to the peritremes. Dorsal shield heavily sclerotized, pointed anteriorly, with characteristic sculpturing pattern (fig. 1). Opisthosoma broken in type specimen, but 1 pair of setae and anal shield seem to be on dorsal integument. Tritosternum 60 μ long and 43 μ wide (holotype), heavily sclerotized. Sternal shield 120 μ long and 168 μ wide, heavily sclerotized, with 3 pairs of small setae and 3 pairs of pores (fig. 2). A pair of moderately long metasternal setae between coxae III. Genital shield pointed posteriorly, with a pair of setae subequal to metasternal setae. Four pairs of setae on posterior ventral integument (1 seta broken in type specimen) that are more than twice longer than the genital setae. Leg I with ventral recurved projections on femur and genu and a small rodlike seta on inner side of tarsus, dorsum as in fig. 2B.

Male: Unknown.

This species is named after Miss Setsuko Nakata, of B. P. Bishop Museum, Honolulu.

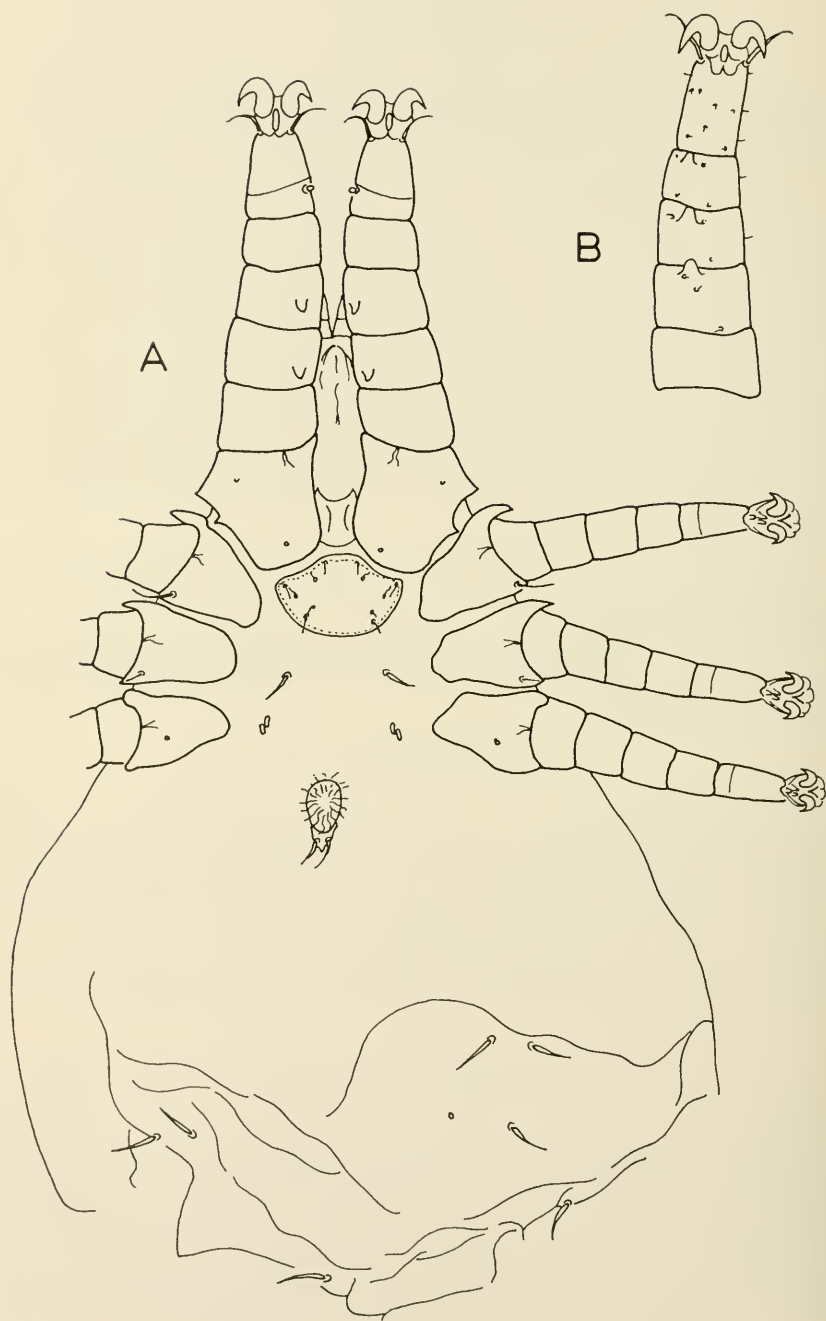
Holotype: ♀, Philippines, Negros Oriental, Camp Look Out, Valencia, August 21, 1964, from *Eonycteris spelaea glandifera* (M-5343), D. S. Rabor.

***Meristaspis hardyi*, n. sp.**

(Fig. 3)

This species is close to *Meristaspis mindanaoensis* Delfinado and Baker but differs from it in having large and thick ventral opisthosomal setae. In holotype, paratypes, and several other specimens of *M. mindanaoensis* examined, all the opisthosomal setae are minute. On the other hand, the opisthosomal setae in *M. hardyi*, n. sp. are always large, more than twice as long as and as thick as the opisthosomal setae in *M. mindanaoensis*.

Female: Idiosoma ovate, 980–1280 μ long and 740–930 μ wide (4 specimens), with a dorsal transverse line separating propodosoma from opisthosoma. Dorsal shield narrow posteriorly, with 10–11 pairs of pores. Four pairs of finely serrated setae anterior to the peritremes, about equal in length; a pair of serrated setae posterior to stigmata. Two pairs of dorsal opisthosomal setae of which 1 pair on dorsal transverse line, 2nd pair at the posterior margin of opisthosoma (fig. 3). Hypostomal processes with recurved teeth at apex. Tritosternum 53–62 μ long and 134–142 μ wide, heavily sclerotized, with a transverse line. Sternal shield 216–230 μ long and 180–211 μ wide, narrow anteriorly, expanded at level of setae II, with 2 pairs of pores and 3 pairs of long and thick setae. A pair of



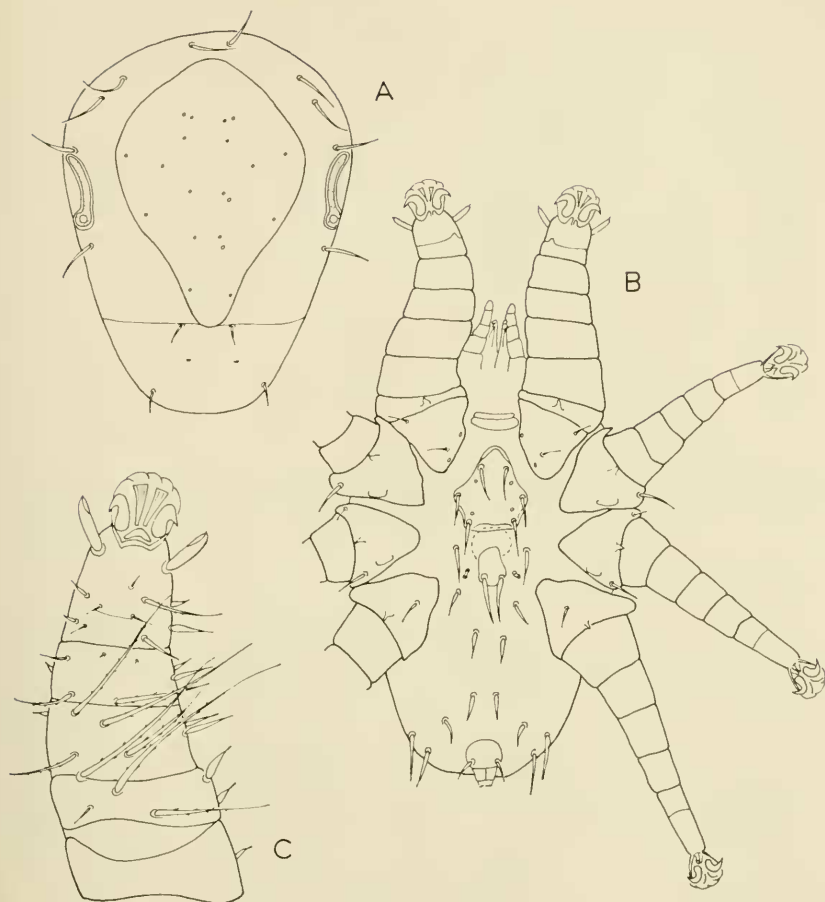


Fig. 3. *Meristaspis hardyi*, n. sp., ♀: A, dorsum; B, venter; C, dorsum of leg I.

metasternal setae, about as long as sternal setae. Genital shield rounded posteriorly, with a pair of setae that are longer than the sternal setae. Six pairs of setae on ventral integument between coxae IV and the posterior margin of opisthosoma, the anterior 4 pairs being shorter than remaining posterior 2 pairs. Anal shield rounded anteriorly, with 2 adanal setae, postanal seta absent. Dorsum of leg I as in fig. 3C.

Male: Unknown.

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Fig. 2. *Ancystropus nakatae*, n. sp., ♀: A, venter; B, dorsum of leg I.

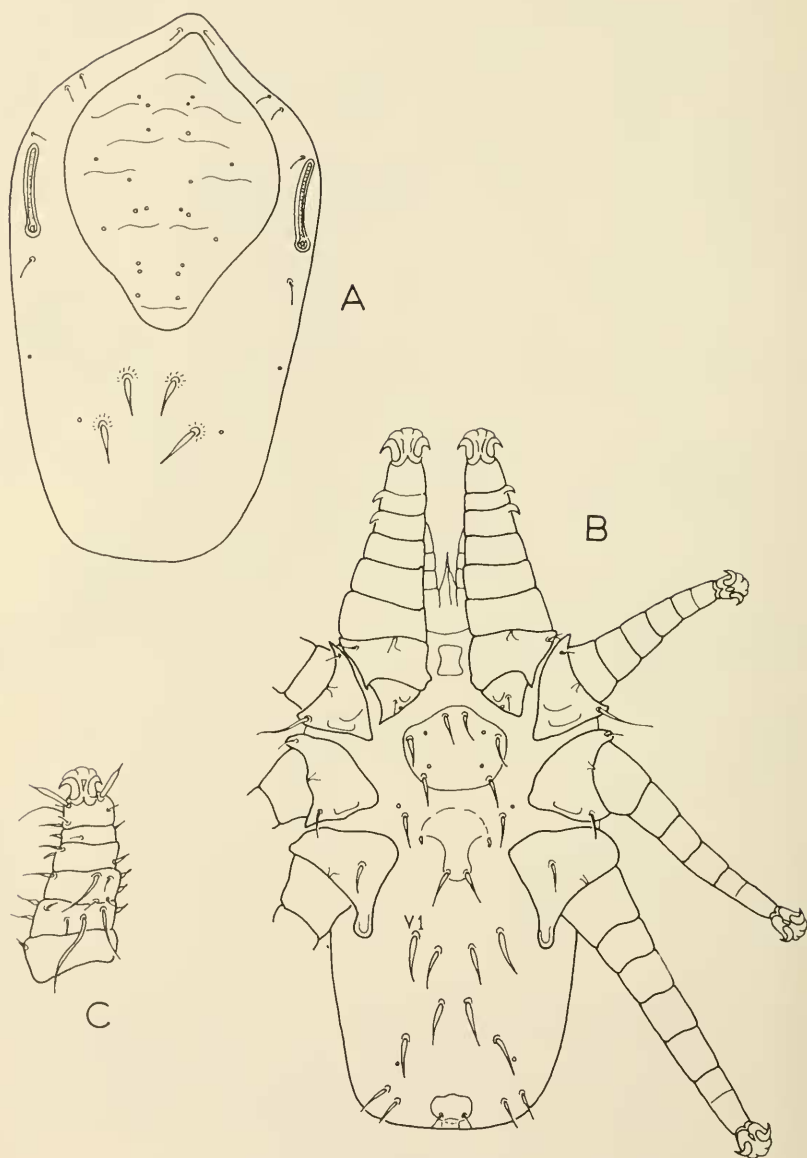


Fig. 4. *Meristaspis jordani philippinensis*, n. ssp., ♀: A, dorsum; B, venter; C, dorsum of leg I.

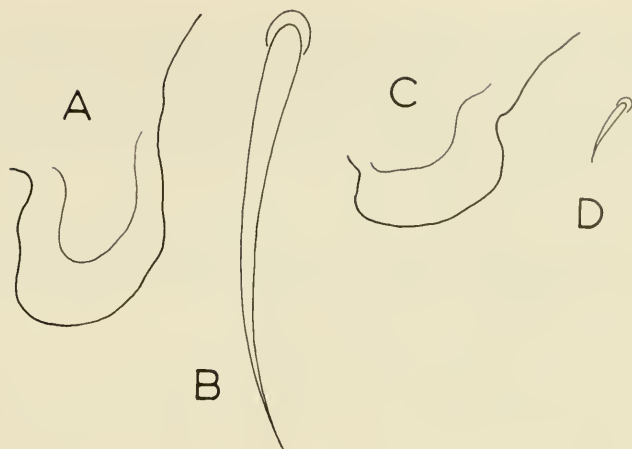


Fig. 5. *Meristaspis jordanii philippineusis*, n. ssp., ♀: A, posterior part of coxa IV; B, first ventral opisthosomal seta (v1). *M. jordanii* (Radford), ♀: C, posterior part of coxa IV; D, first ventral opisthosomal seta (v1).

This species is named after Dr. Elmo D. Hardy, of Entomology Department, University of Hawaii, Honolulu.

Holotype: ♀, Solomon Islands, Guadalcanal, Nini Creek, Horoni ± 20 m., May 11, 1964, from *Nyctimene major* (BBM-SI 23839), P. Temple.

Paratypes: 2 ♀♀, with same data as holotype; 1 ♀, with locality and collector as in holotype, May 8, 1964, from *Pteropus* sp. (BBM-SI 23822). A paratype is to be deposited in U. S. National Museum, Washington, D. C.

***Meristaspis jordanii philippinensis*, n. ssp.**
(Figs. 4, 5)

This species resembles *Meristaspis jordanii* (Radford) but differs from it in that *M. philippinensis* n. ssp. has the lobe on the posterior margin of coxae IV considerably extended and the pair of first ventral opisthosomal setae (v1) are more than twice as long as the setae (v1) in *M. jordanii* (fig. 5).

Female: Idiosoma 670–840 μ long and 472–480 μ wide (2 specimens), rounded posteriorly. Dorsal shield narrow posteriorly, with 10–11 pairs of pores and many small transverse lines. Four pairs of small propodosomal setae anterior to peritremes, about equal in length; a pair of setae posterior to stigmata, about one and a half times longer than propodosomal setae. Two pairs of long, thick opisthosomal setae of which the 2nd pair associated with a pair of pores (fig. 4). Hypostomal processes harpoon shaped. Tritosternum 43–46 μ long and 34–39 μ wide, concave laterally. Sternal shield 154–158 μ long and 165–168 μ wide, with

2 pairs of pores and 3 pairs of long, thick setae. A pair of metasternal setae, each associated with a pore, about as thick and as long as sternal setae. Genital shield rounded posteriorly, with a pair of setae. Four pairs of long, thick setae on ventral integument between genital and anal shield and 2 pairs of comparatively small setae lateral to the anal shield. Anal shield rounded laterally, with 2 small adanal setae, postanal seta absent. Tibia and tarsus of leg I with lateral hooks, dorsum of leg I as in fig. 4C.

Male: Unknown.

Holotype: ♀, Philippines, Negros Oriental, Malindog, San Antonio, Sibulan, September 22, 1964, from *Harpyionycteris whiteheadi* (M-6328), D. S. Rabor.

Paratype: 1 ♀, with same data as holotype.

Periglischrodes gressitti Bak. and Delf.

Periglischrodes gressitti Baker and Delfinado, 1964, Pacific Ins. 6(4): 589.

P. gressitti was described from a single specimen collected from an unknown host from New Guinea. I have examined the holotype female which is a true nasal mite. As such, this is transferred from Spinturnicidae to Rhinonyssidae.

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SYMPHYTA OF THE WEST INDIES, INCLUDING THOSE COLLECTED DURING THE BREDIN-ARCHBOLD-SMITHSONIAN BIOLOGICAL SURVEY OF DOMINICA (HYMENOPTERA)

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ABSTRACT—Three species of Symphyta were collected during the Bredin-Archbold-Smithsonian Biological Survey of Dominica, *Acordulecera insularis* Ashmead, *Acordulecera* sp., and *Hemidianeura thoracica* Ashmead. A key is given for these and the six other species of sawflies known to occur in the West Indies.

Twelve specimens representing three species of sawflies were collected during the Bredin-Archbold-Smithsonian Biological Survey of

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